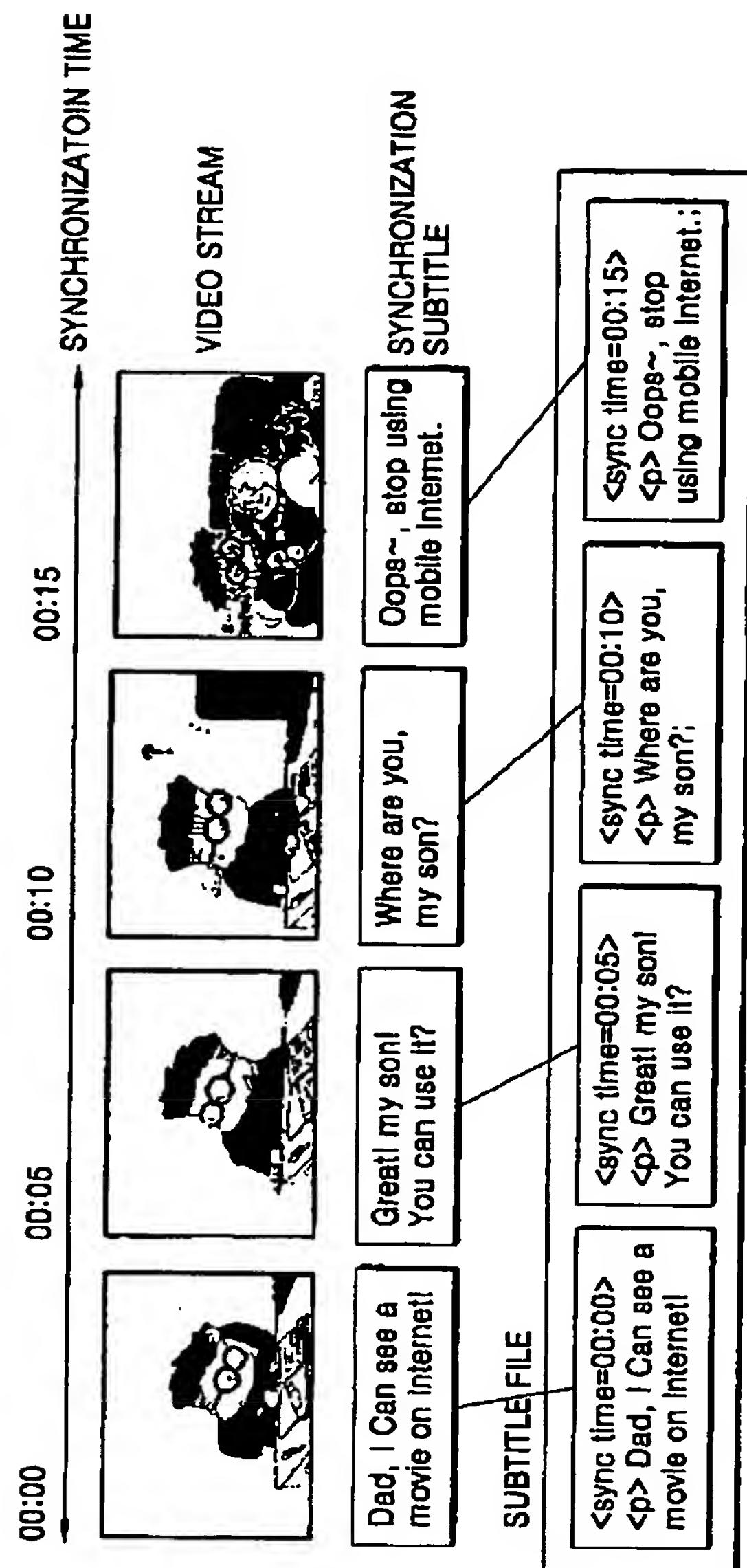


FIG. 1



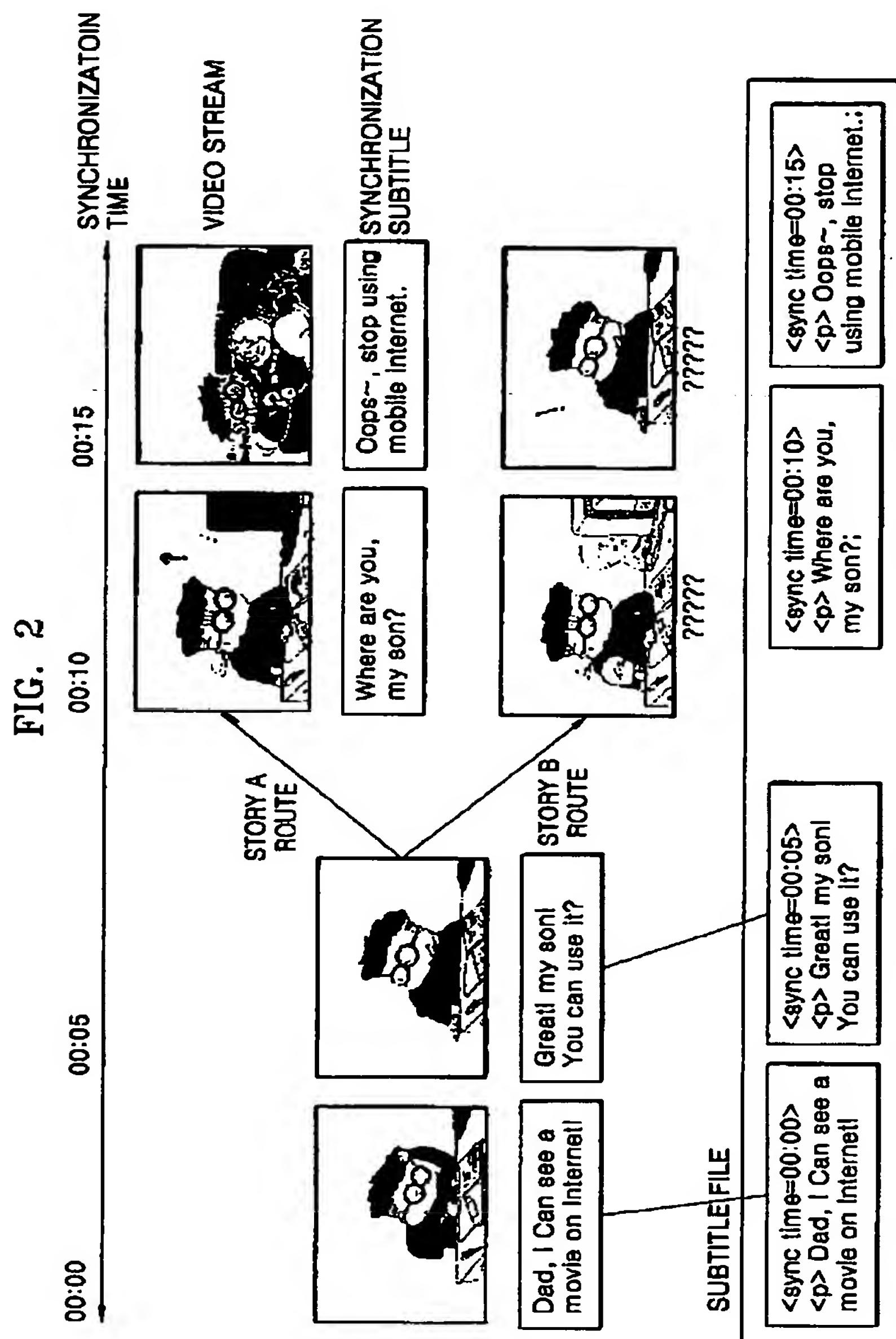


FIG. 3

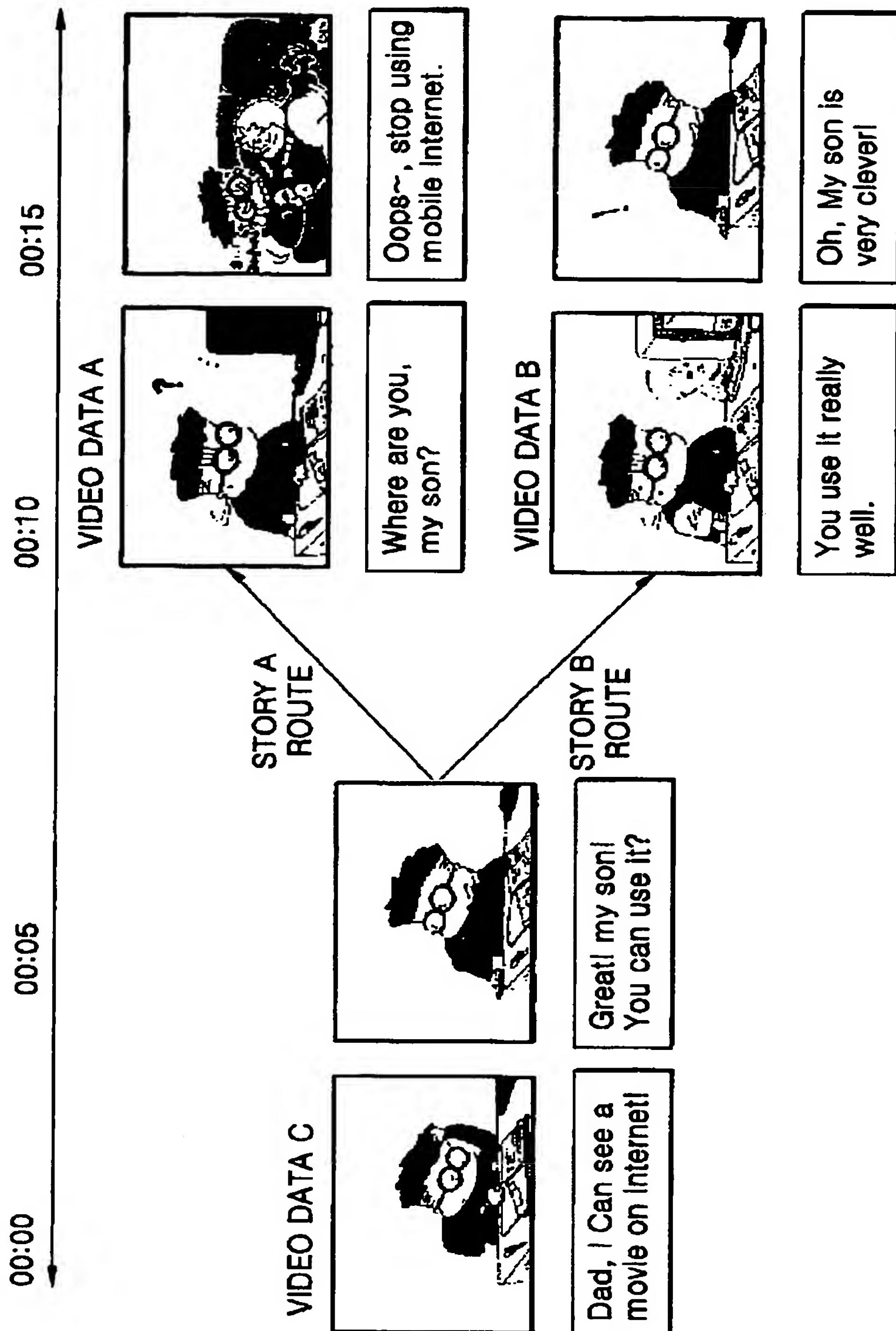


FIG. 4

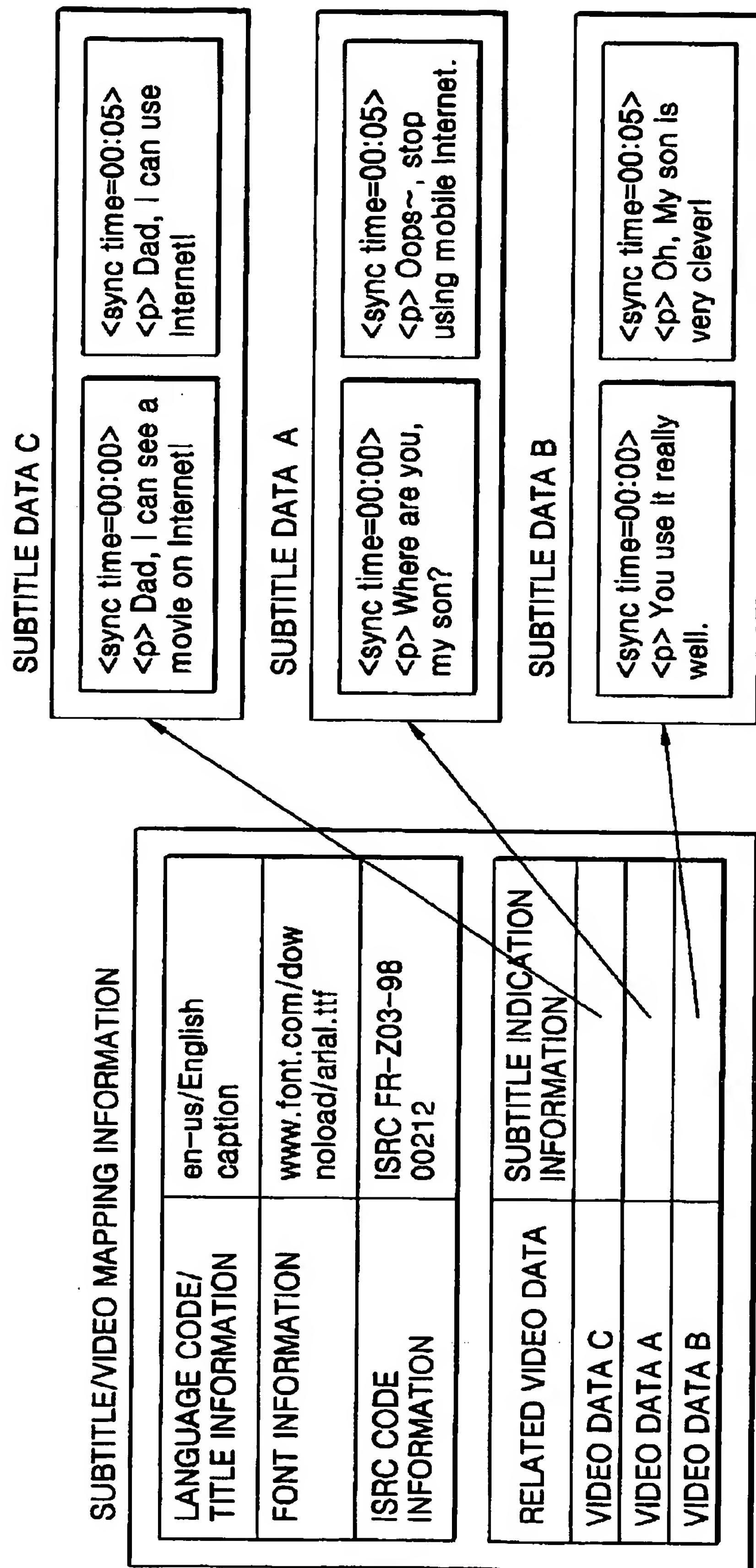


FIG. 5

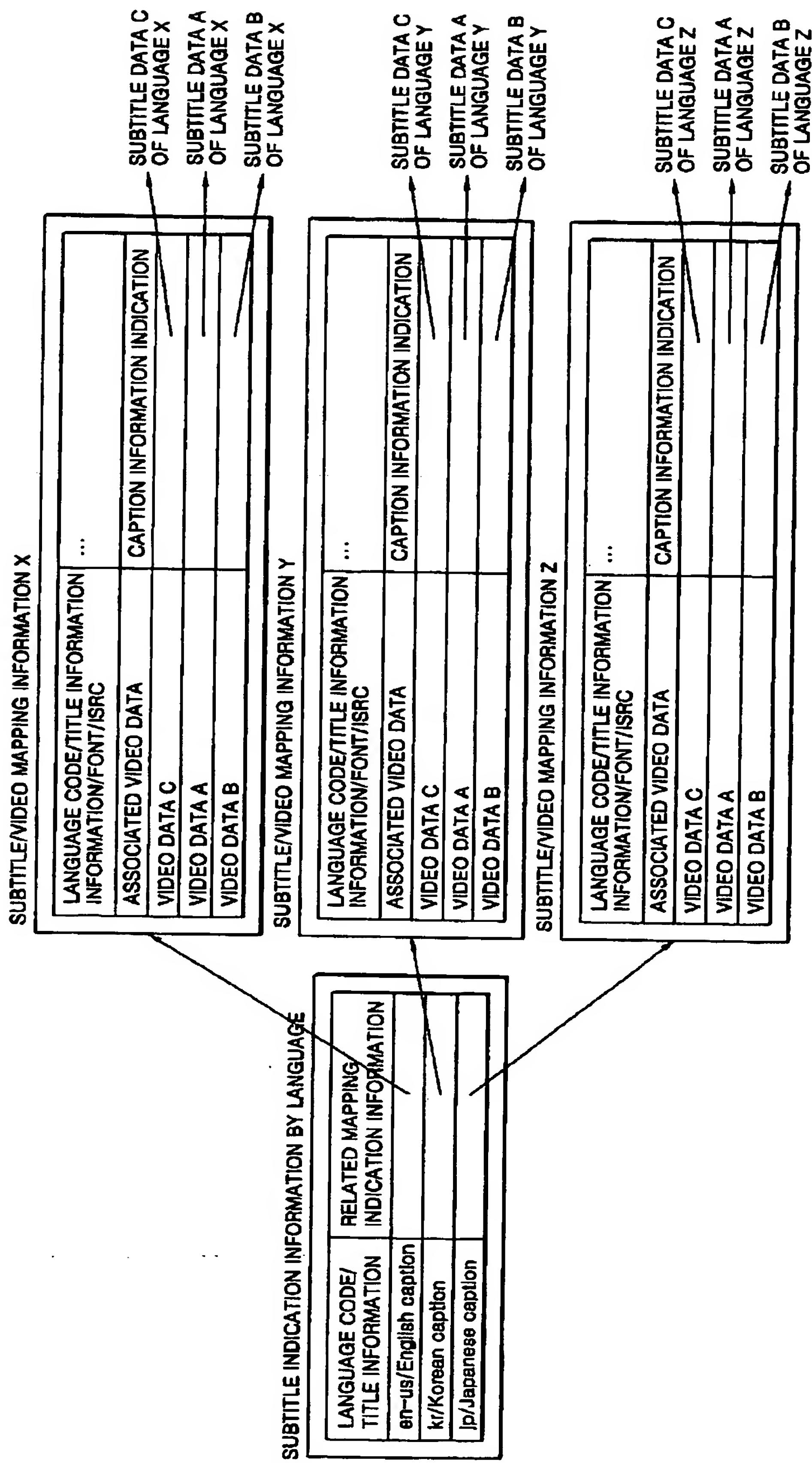


FIG. 6

SUBTITLE DATA

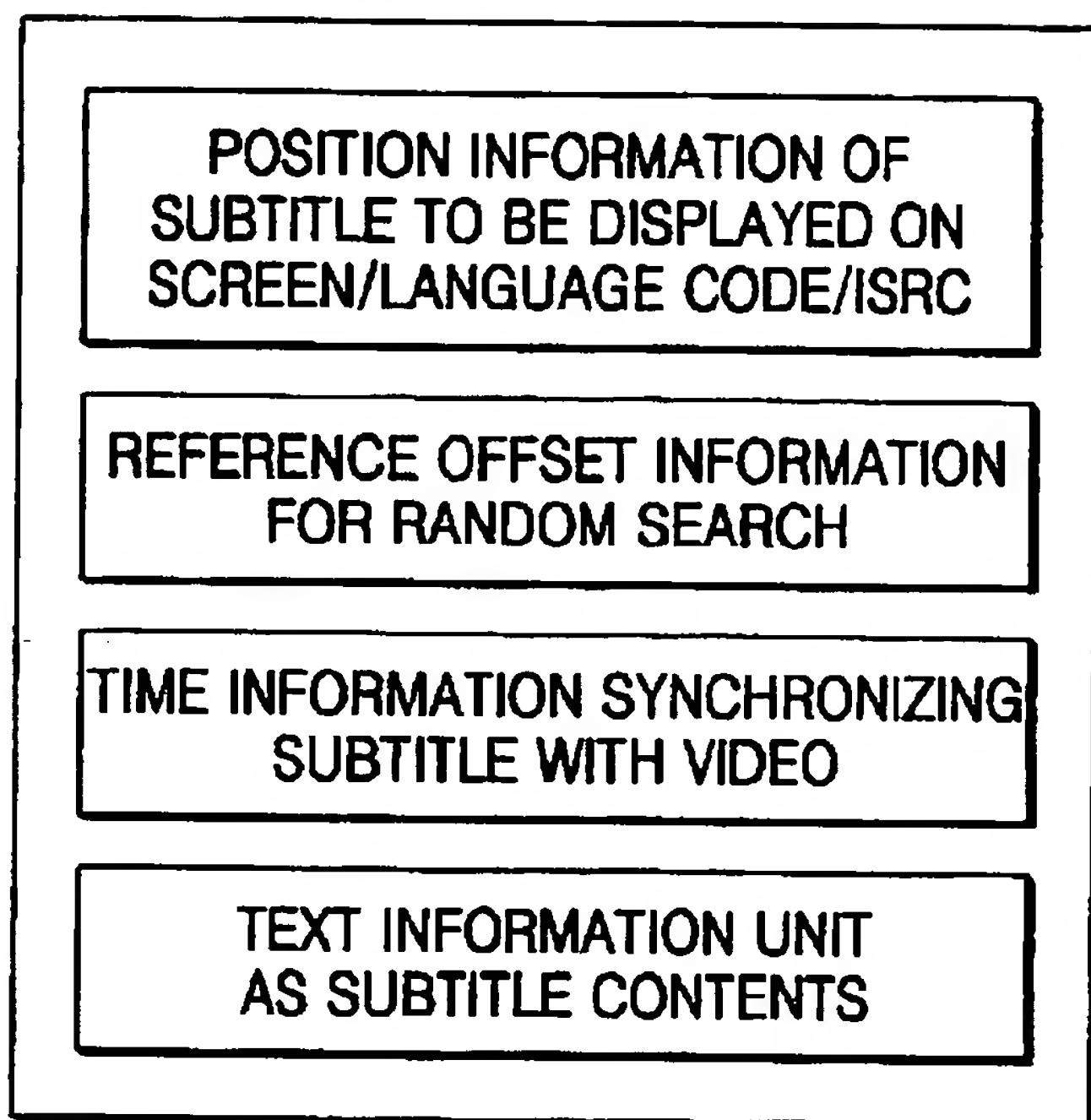
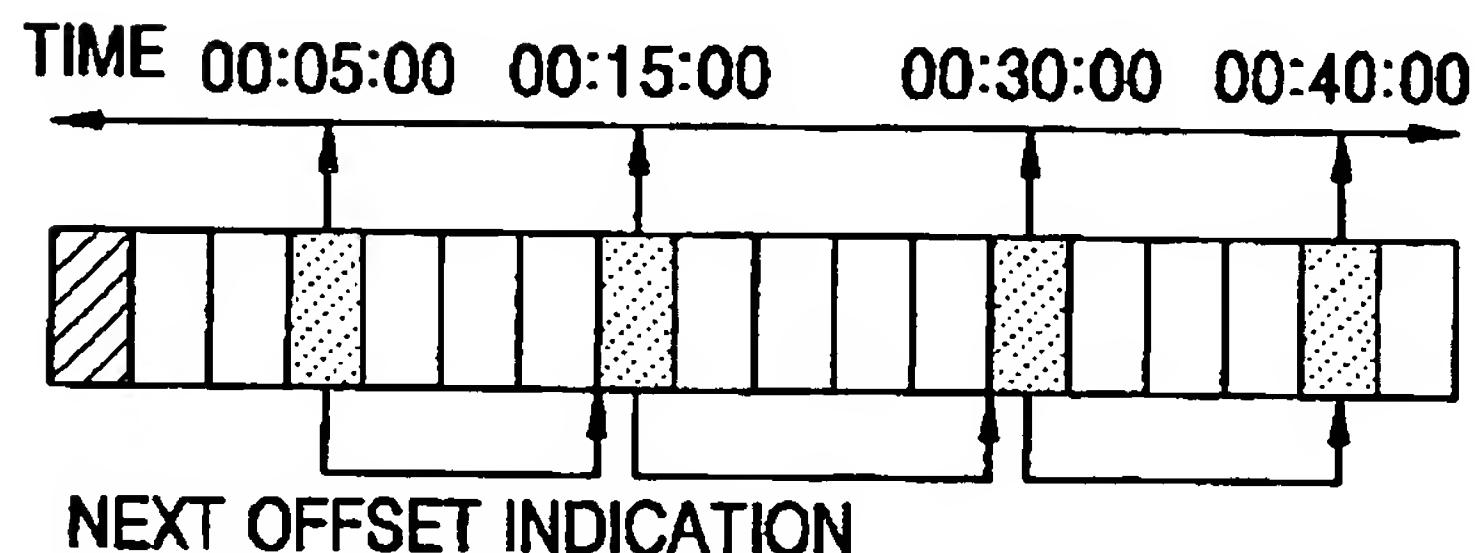


FIG. 7



- POSITION INFORMATION OF SUBTITLE TO BE DISPLAYED ON SCREEN/LANGUAGE CODE/ISRC
- REFERENCE OFFSET INFORMATION FOR BEGINNING TO DISPLAY SUBTITLE
- TIME INFORMATION SYNCHRONIZING SUBTITLE WITH VIDEO/TEXT INFORMATION UNIT AS SUBTITLE CONTENTS

FIG. 8

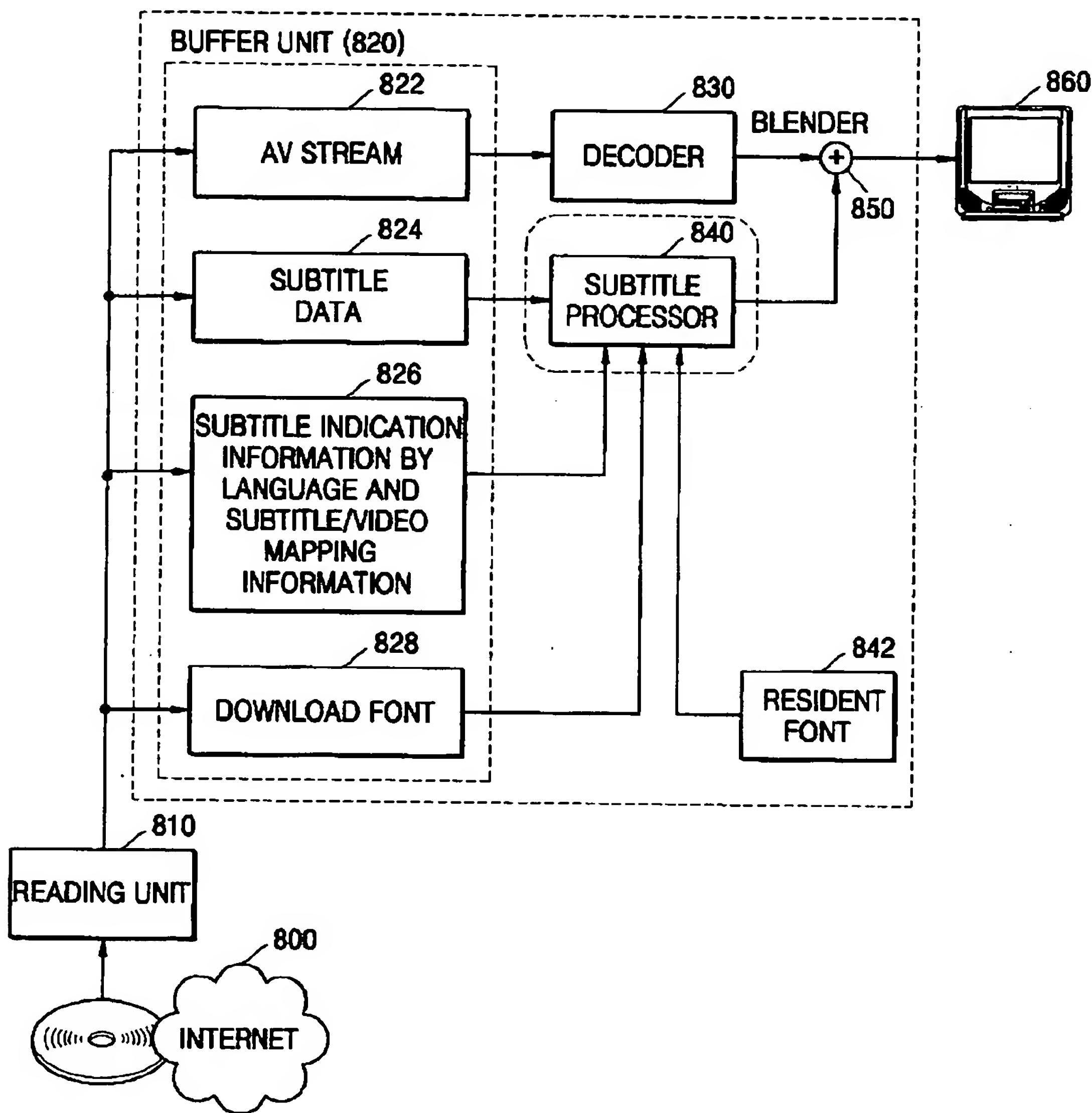


FIG. 9

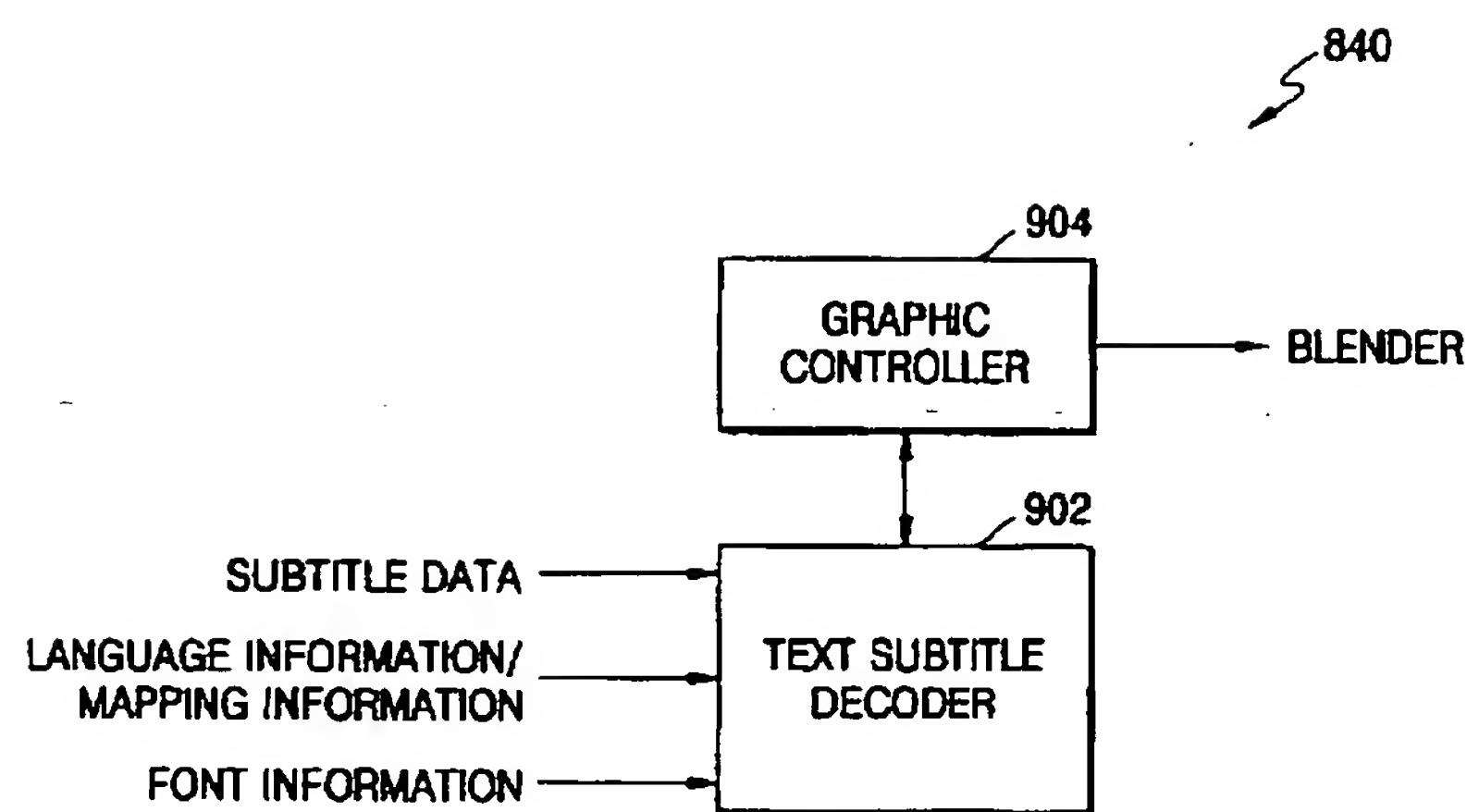


FIG. 10

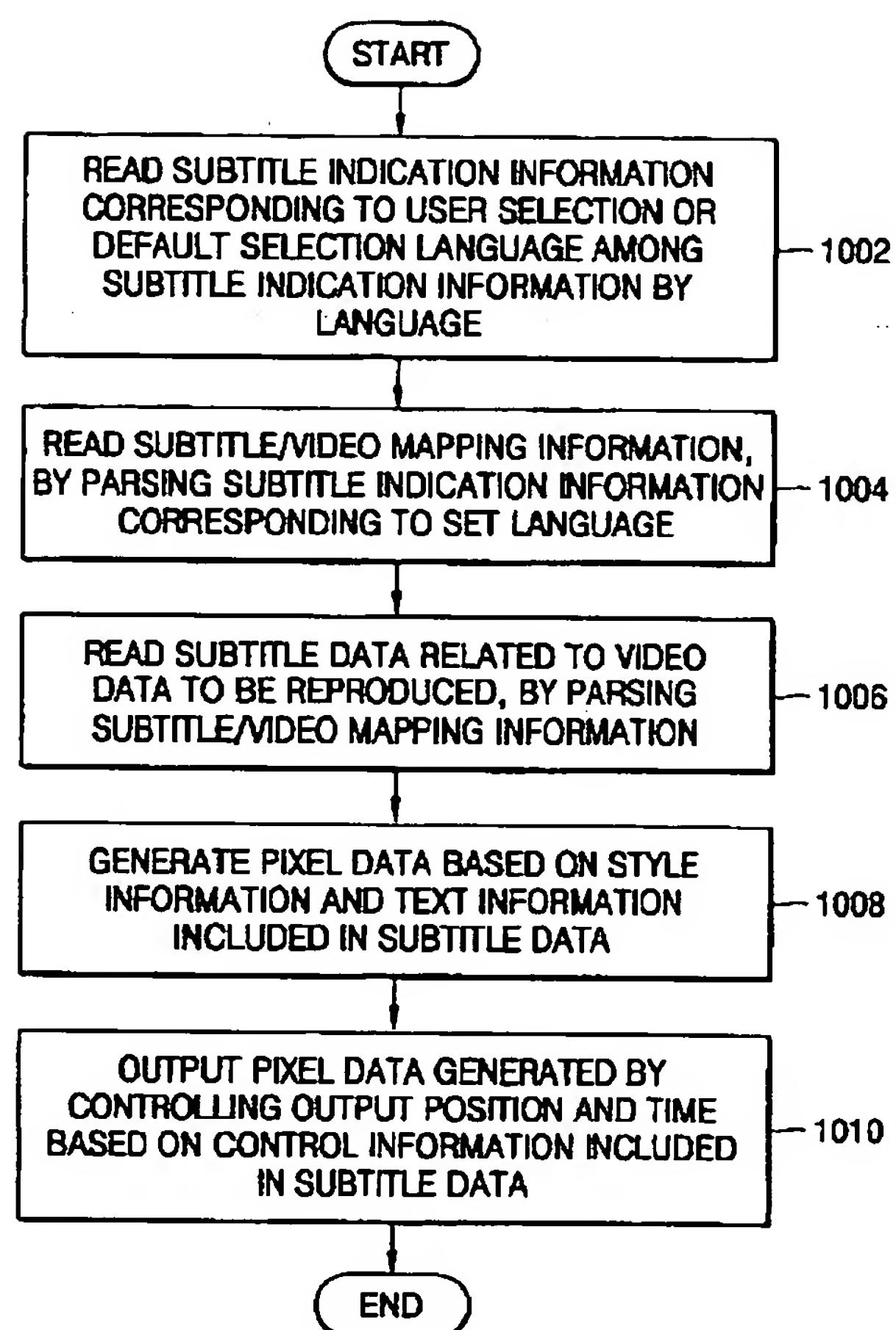


FIG. 11

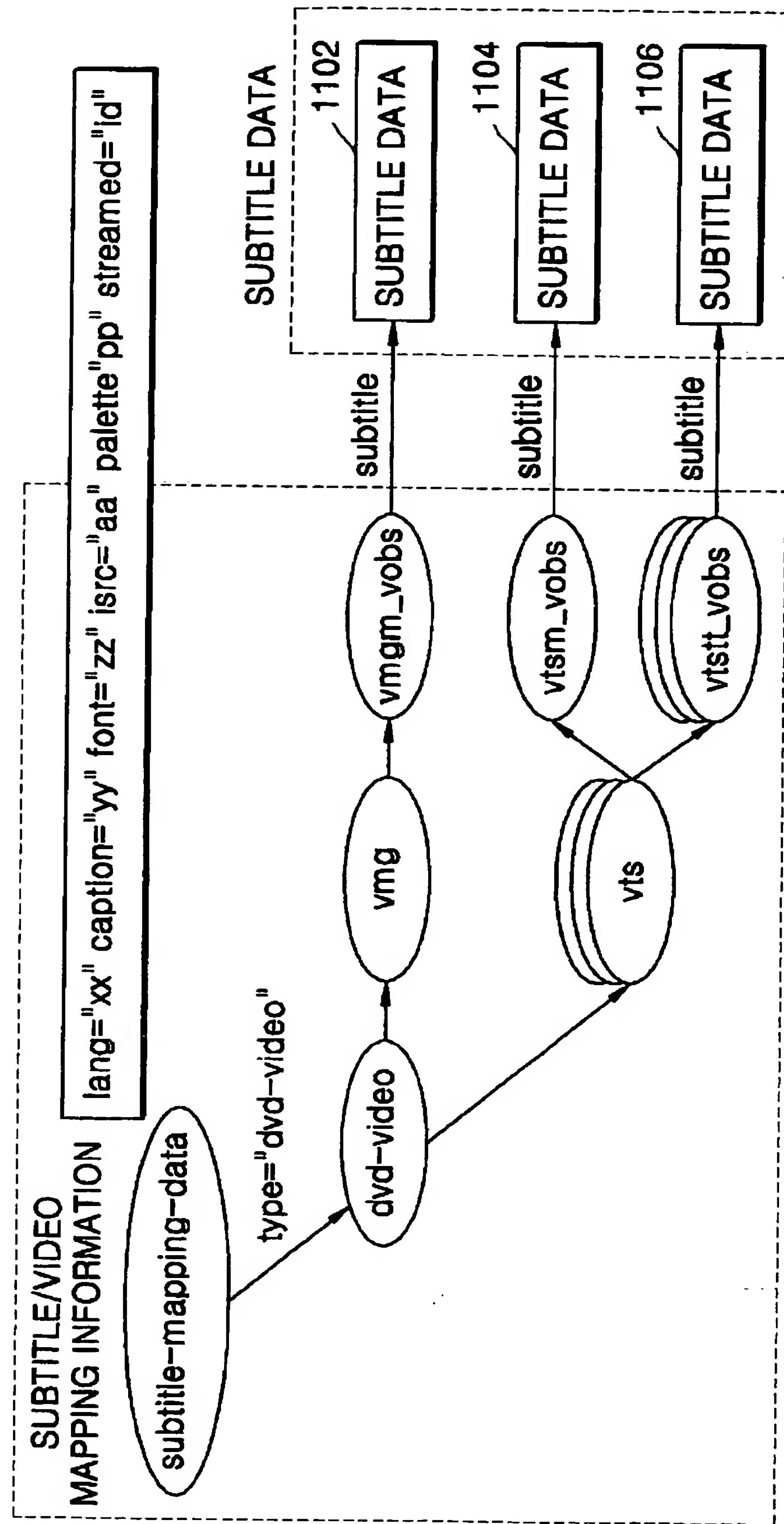


FIG. 12

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<color index="1" yuv="108080" />
<color index="2" yuv="3b8080" />
<color index="3" yuv="668080" />
<color index="4" yuv="918080" />
<color index="5" yuv="bc8080" />
<color index="6" yuv="eb8080" />
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</vmsgm_vobs>
</vmg>
<vts idn="1">
<vtsm_vobs>
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<vtstt_vobs>
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<subtitle vob_idn="10-49" href="file://english_tt1vob10.text" />
<subtitle vob_idn="50-100" href="file://english_tt1vob50.text" />
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</subtitle-mapping-data>
```

FIG. 13

| | | | |
|---|------------------------------------|--|------|
| LANGUAGE (EXAMPLE. en-us) | | | |
| SUBTITLE TITLE (EXAMPLE. English caption) | | | |
| FONT INFORMATION (EXAMPLE, http://www.font.com/downloa d/arial.ttf) | | | |
| ISRC (EXAMPLE, ISRC FR-Z03-98-00212) | | | |
| PALETTE INFORMATION | | | |
| STREAM ID INFORMATION | | | |
| VOBS INDICATION INFORMATION (EXAMPLE, VMGM_VOBS) | VOB INDICATION INFORMATION(1) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_vmgm.txt) | 1302 |
| VOBS INDICATION INFORMATION (EXAMPLE, VTSM_VOBS) | VOB INDICATION INFORMATION(1) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_vtsm.txt) | 1304 |
| VOBS INDICATION INFORMATION (EXAMPLE, VTSTT_VOBS) | VOB INDICATION INFORMATION(1-9) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_tt1vob1.text) | |
| VOBS INDICATION INFORMATION (EXAMPLE, VTSTT_VOBS) | VOB INDICATION INFORMATION(10-49) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_tt1vob10.text) | 1306 |
| VOBS INDICATION INFORMATION (EXAMPLE, VTSTT_VOBS) | VOB INDICATION INFORMATION(50-100) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_tt1vob50.text) | |

FIG. 14

SUBTITLE DATA

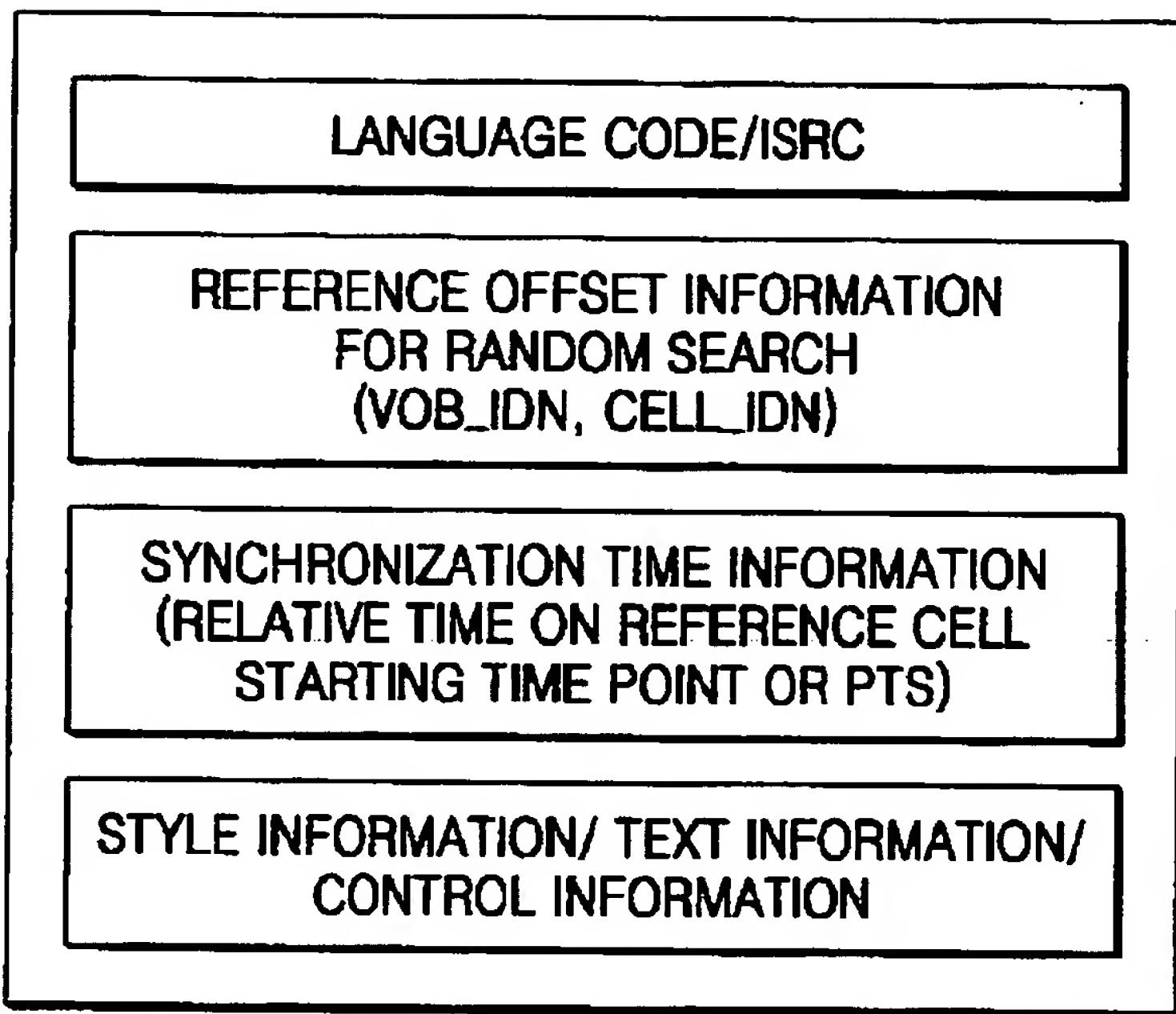


FIG. 15A

SCREEN DISPLAY AREA

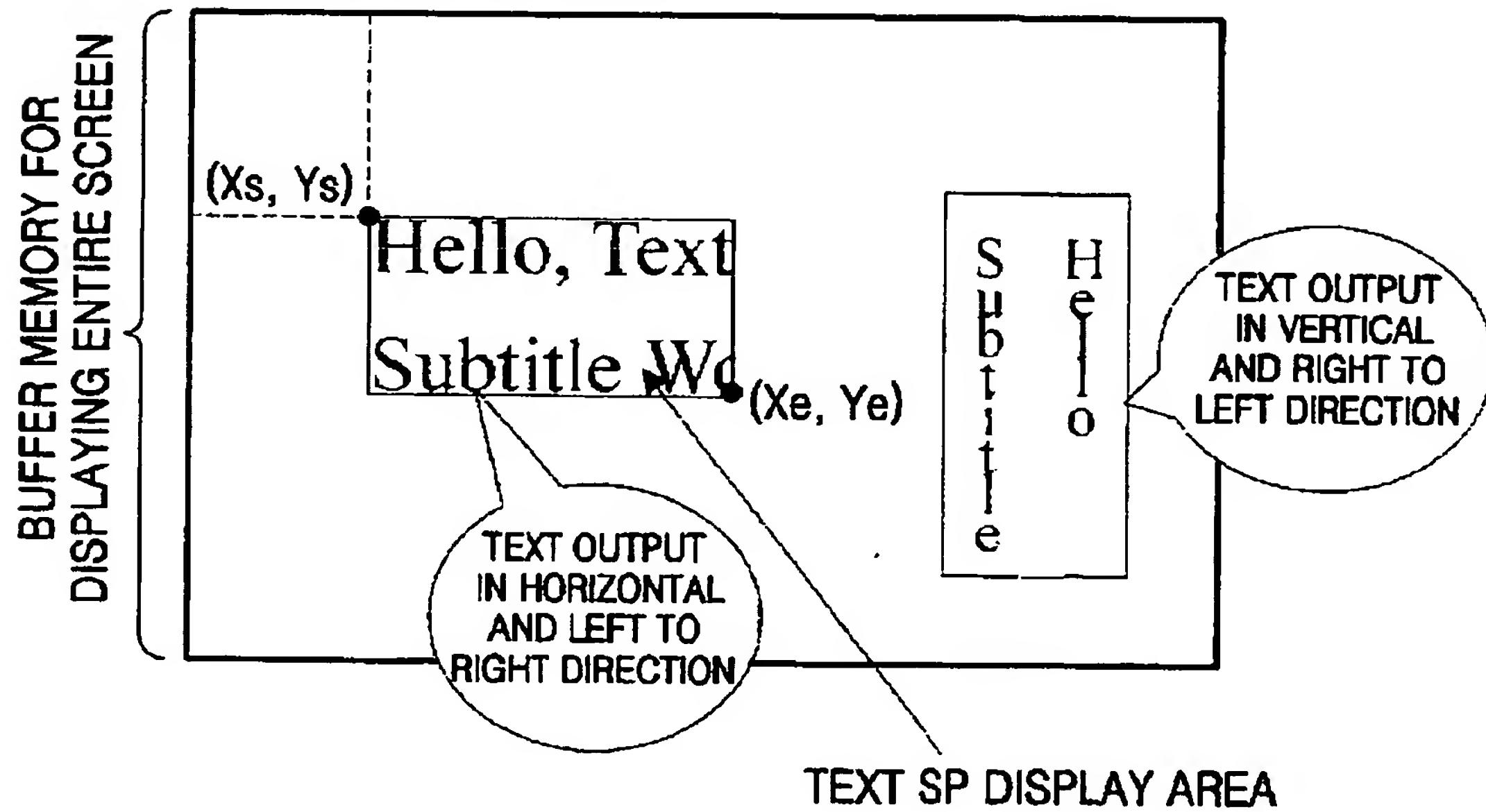


FIG. 15B

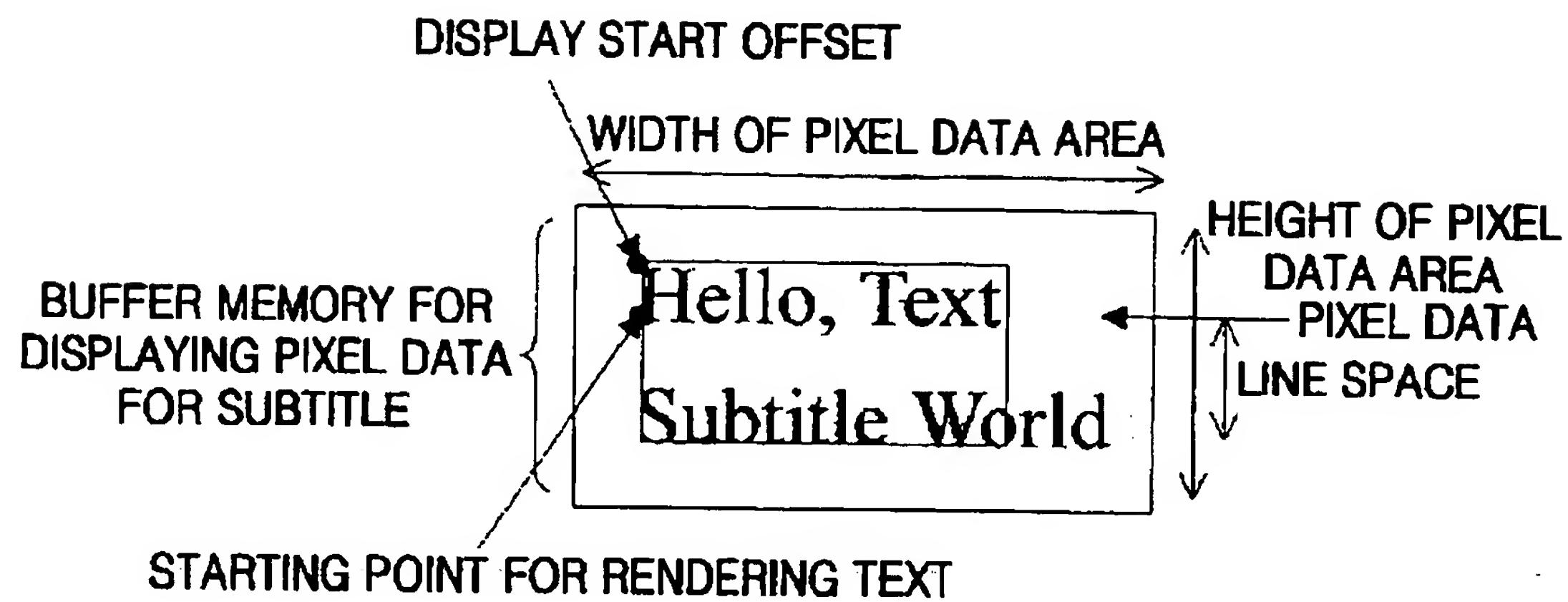


FIG. 16

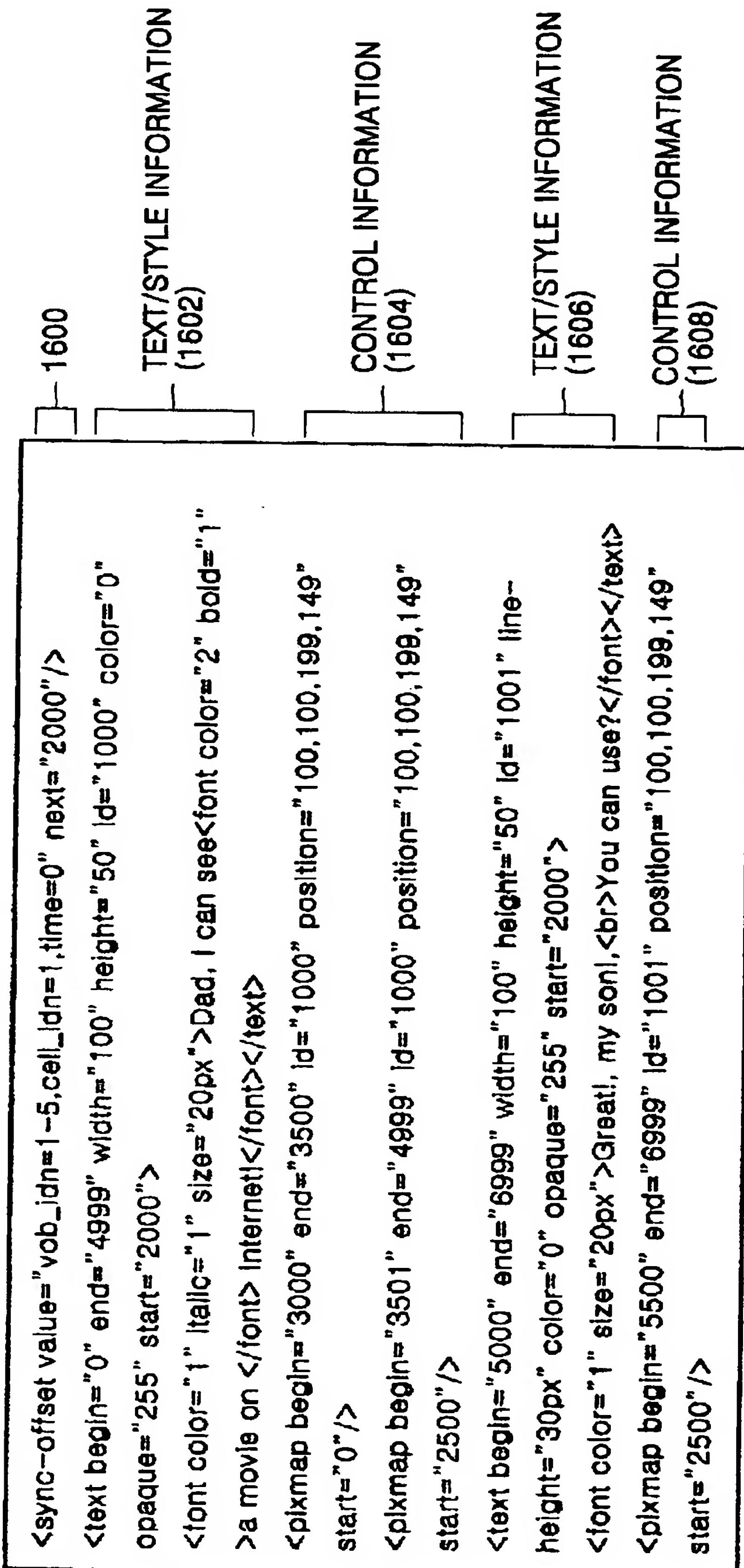


FIG. 17

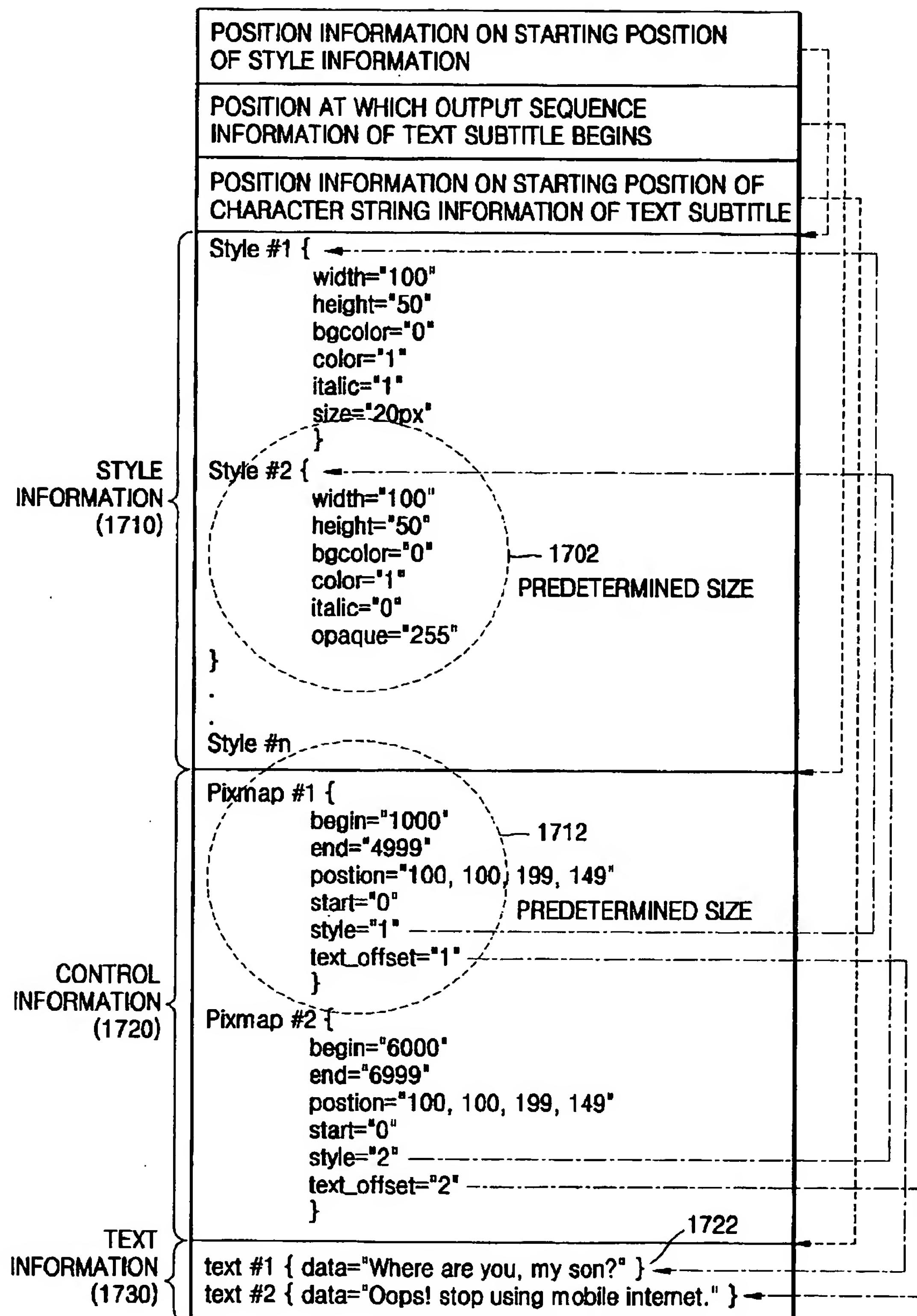


FIG. 18

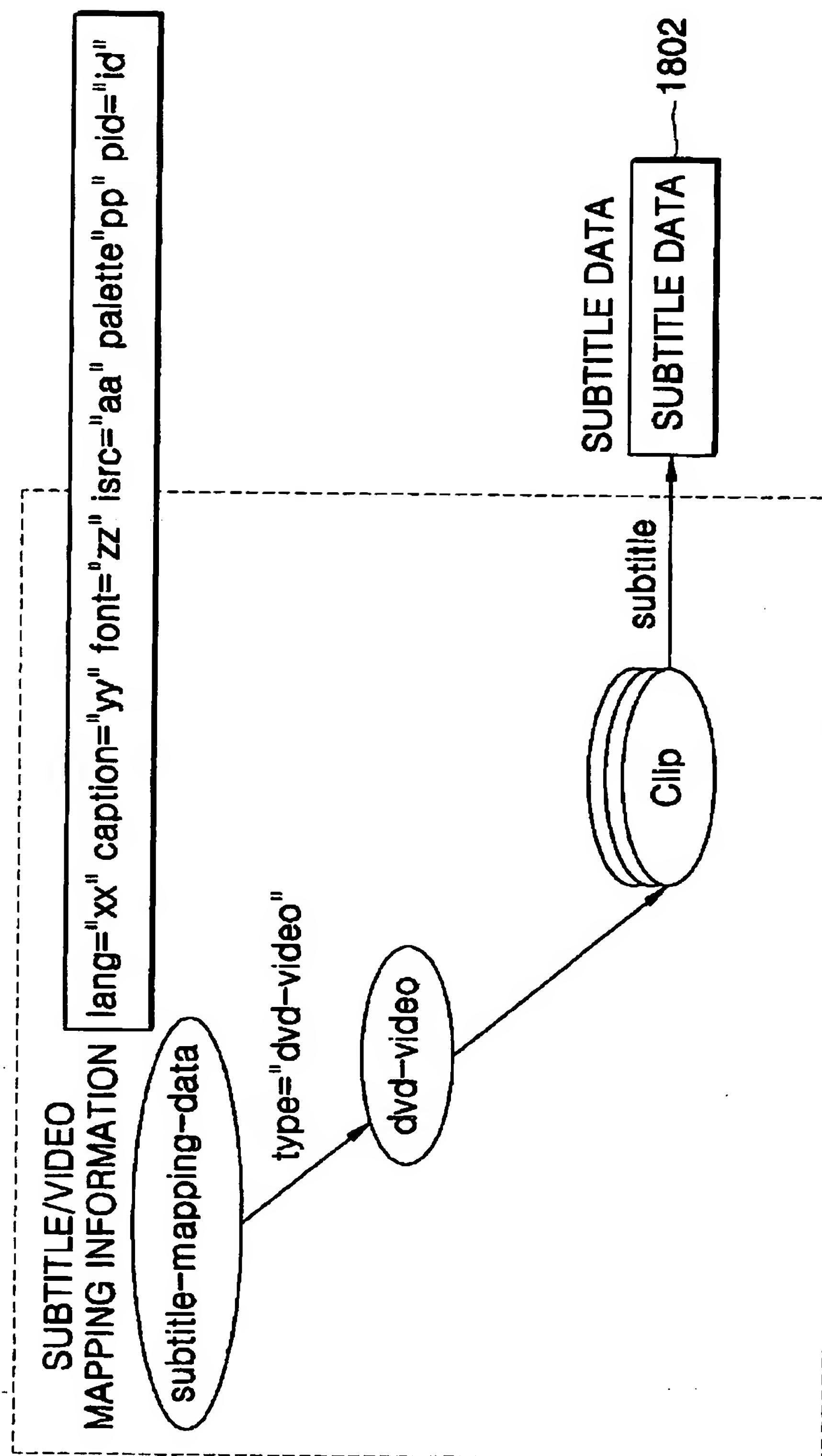


FIG. 19

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</blu-ray-video>
</subtitle-mapping-data>

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FIG. 20

| | |
|--|--|
| LANGUAGE (EXAMPLE, en-us) | |
| SUBTITLE TITLE (EXAMPLE, English caption) | |
| FONT INFORMATION (EXAMPLE, http://www.font.com/download/arial.ttf) | |
| ISRC (EXAMPLE, ISRC FR-Z03-98-00212) | |
| PID INFORMATION | |
| CLIP INDICATION INFORMATION (0001.clip) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_001.text) |
| CLIP INDICATION INFORMATION (0001.clip) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_002.text) |
| CLIP INDICATION INFORMATION (0001.clip) | SUBTITLE DATA POSITION INFORMATION (EXAMPLE, file://english_003.text) |
| 2002 | |

FIG. 21

SUBTITLE DATA

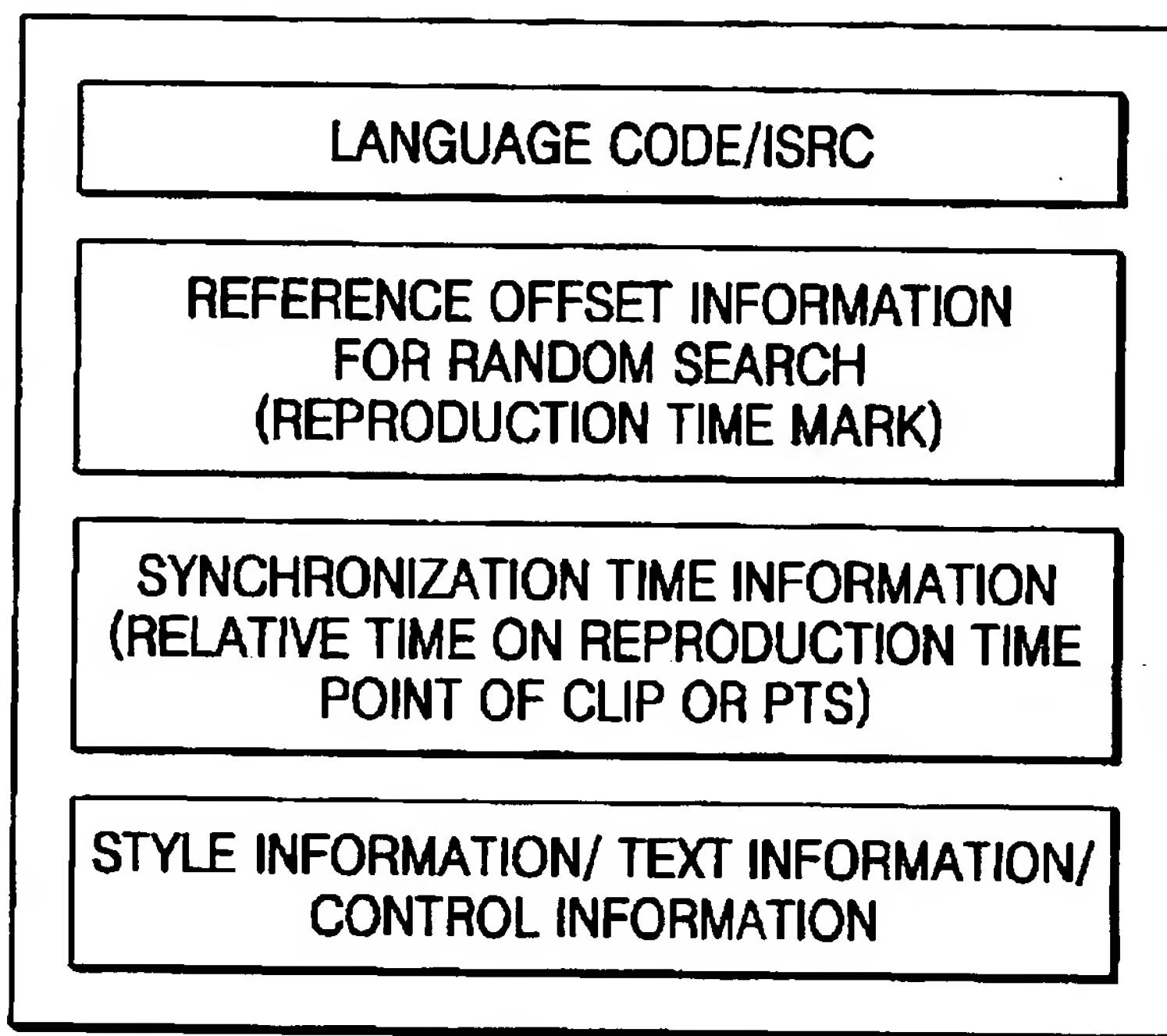


FIG. 22A

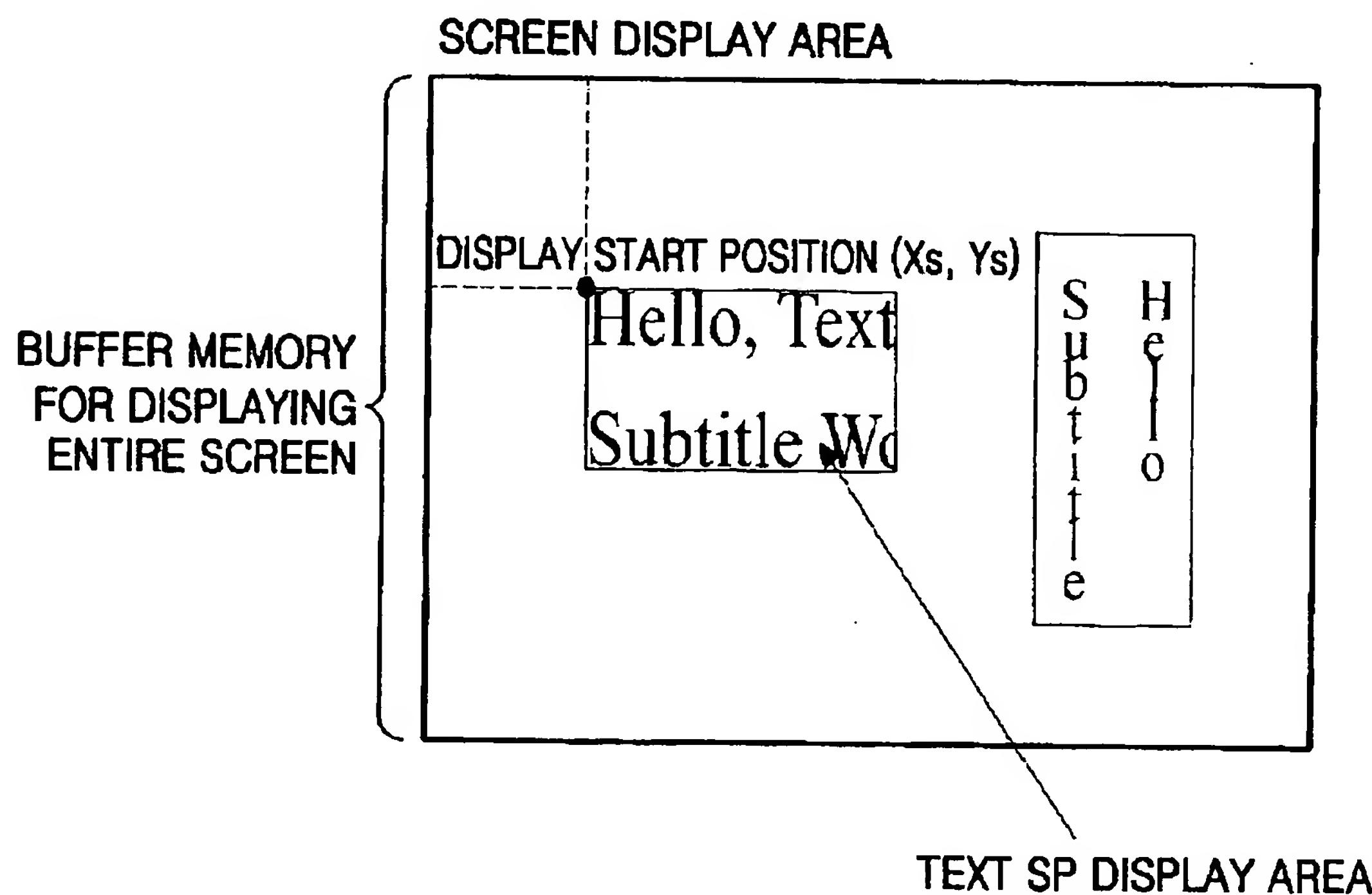


FIG. 22B

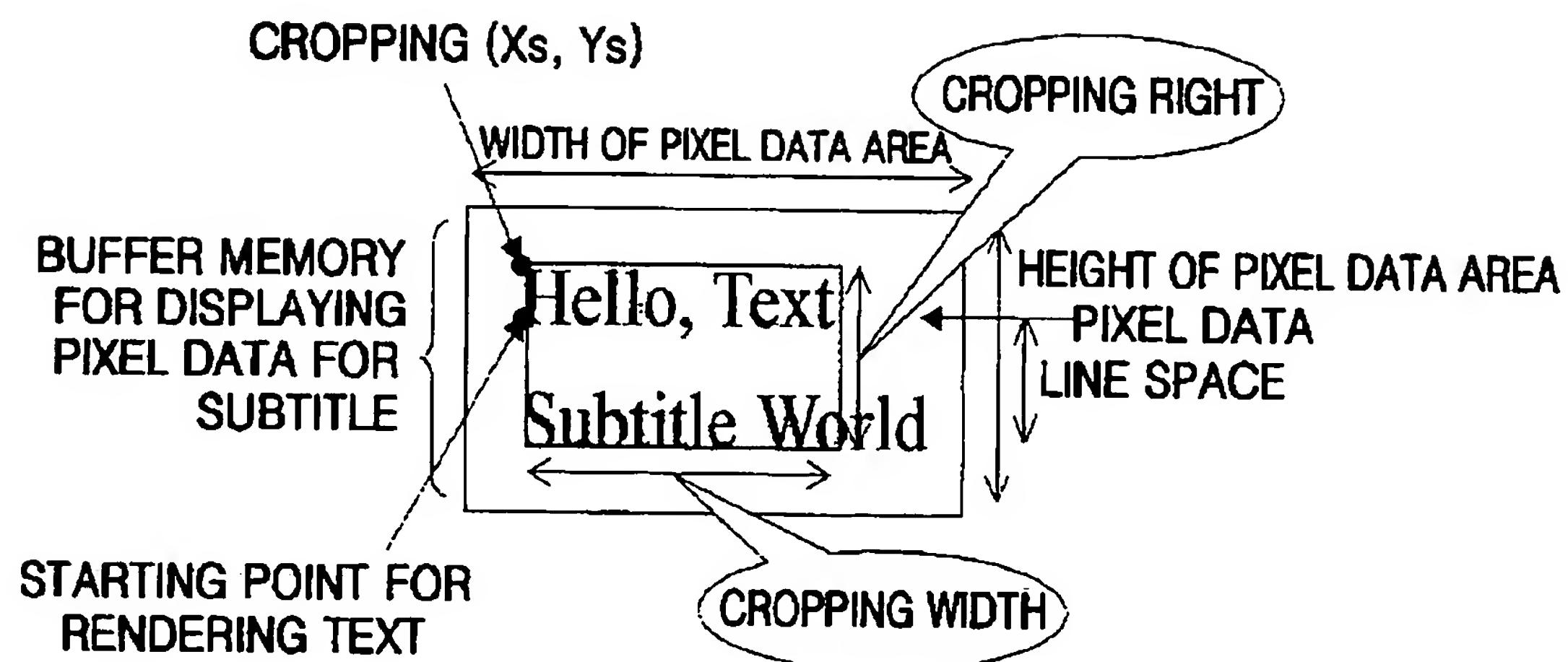


FIG. 23

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  <color index="3" yuv="668080ff"/>
  <color index="4" yuv="918080ff"/>
  <color index="5" yuv="bc8080ff"/>
</palette>
<text begin="0" end="4999" width="100" height="5" id="1000" color="0"
start="2000">
<font color="1" italic="1" size="20px">Dad, I can see<font color="2" bold="1"
>a move on </font></font></text>
<composition begin="3000" end="4999" palette="1">
<pixmap id="1000" position="100.100" cropping="0.0.100.50"/>
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</composition>
<text begin="5000" end="6999" width="100" height="50" id="1001" line-
height="30px" color="0" start="2000">
<font color="1" size="20px">Great! my son!<br>You can use?</font></text>
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</composition>
</subtitle-data>

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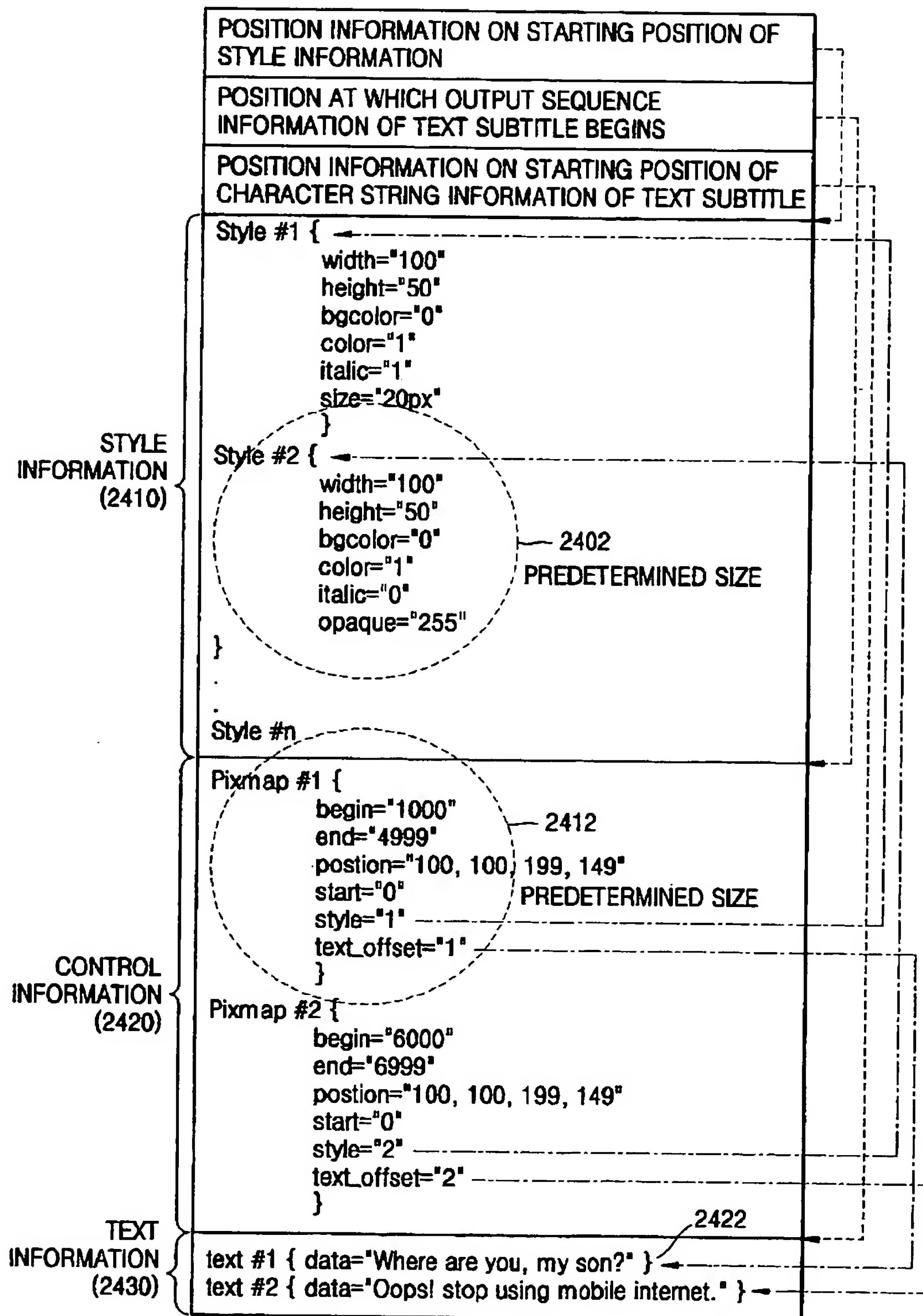
TEXT/STYLE INFORMATION
(2302)

CONTROL INFORMATION
(2304)

TEXT/STYLE INFORMATION
(2306)

CONTROL INFORMATION
(2308)

FIG. 24



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2004/002481

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G11B 20/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G1B 20/10 H04N 5

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Patents and applications for inventions since 1975

Korean Utility models and applications for utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
"multi* story or multi* path", "subtitle or subpicture"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| A | US 2003/0099464 A1 (YEONG-HEON OH ET AL) 29 May 2003 See the whole document | 1-17 |
| A | US 2001/0053280 A1 (KAZUHIKO YAMAUCHI ET AL) 20 Dec 2001 See the whole document | 1-17 |
| A | US 6,345,147 B1 (KABUSHIKI KAISHA TOSHIBA) 5 Feb 2002 See the whole document | 1-17 |
| A | US 5,497,241 A (TIME WARNER ENTERTAINMENT CO., L.P.) 5 Mar 1996 See the whole document | 1-17 |

Further documents are listed in the continuation of Box C.

See patent family annex

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search

21 DECEMBER 2004 (21.12.2004)

Date of mailing of the international search report

21 DECEMBER 2004 (21.12.2004)

Name and mailing address of the ISA/KR

 Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

HAN, Choong Hee

Telephone No. 82-42-481-5700



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